

BUSINESS CONDITIONS

SEVENTH FEDERAL



RESERVE DISTRICT

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CHICAGO, MAY 1, 1923

BUSINESS CONDITIONS IN THE UNITED STATES

Further increases in the production of basic commodities, in wholesale prices, employment, wage rates, and wholesale and retail trade, took place in March.

PRODUCTION: Production in basic industries, according to the Federal Reserve Board's index, increased 4 per cent in March to a level 8 per cent higher than at the 1920 peak and 67 per cent above the low point of 1921. The output of pig iron, steel ingots, automobiles, and crude petroleum, and the mill consumption of cotton exceeded all previously reported monthly totals. Building operations showed a further large expansion and the value of contracts let for residences in March was the highest on record. Railroad freight shipments have been larger every week this year than in the corresponding weeks of the past four years. Car shortage has been reduced to the lowest point since September, chiefly as a result of the addition of new equipment, a decrease in the number of bad order locomotives and cars, and a concerted effort to increase the average loadings.

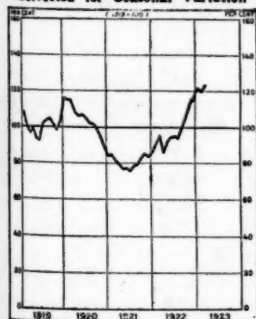
Employment in the building trades and in many lines of manufacturing continued to increase in the eastern states. The surplus of unskilled labor in

the West reported in earlier months is being gradually absorbed by the seasonal increase in farm work. A number of leading textile mills, steel mills, and packing plants announced general wage advances ranging between 11 and 12½ per cent, and numerous wage advances in other industries also were reported.

TRADE: March sales by department stores reporting to Federal Reserve banks were 22 per cent above those of March a year ago, partly because Easter purchases were made in March this year, whereas last year such purchases were largely deferred until April. Stocks of goods held by department stores were 6 per cent larger than those held a year ago but this increase was not as large as the increase in sales and hence the rate of stock turnover has been somewhat more rapid. Sales by mail order houses were larger than for any month since November, 1920, and 35 per cent larger than in March, 1922. Wholesale trade in all reporting lines was larger than in March a year ago.

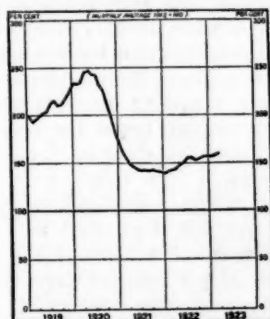
WHOLESALE PRICES: Wholesale prices as measured by the Bureau of Labor Statistics index advanced 1.2 per cent during March, and were 15 per cent above the low point of January, 1922. As

INDEX OF PRODUCTION IN BASIC INDUSTRIES
Combination of 22 Individual Series
Corrected for Seasonal Variation



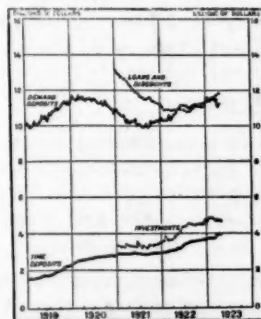
Latest figure March, 1923—125

PRICES—INDEX NUMBER OF
WHOLESALE PRICES
U. S. Bureau of Labor Statistics



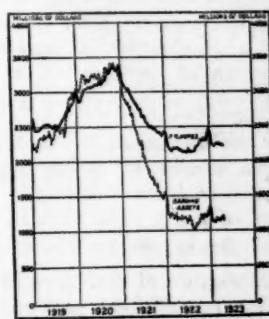
Base adopted by the Bureau of Labor Statistics. Latest figure March 1923—159

BANK CREDIT
800 Member Banks in Leading Cities



Latest figures April 11, 1923: Loans and Discounts, 11,818 million; Investments, 4,678 million; Demand Deposits, 11,351 million; Time Deposits, 5,951 million.

BANK CREDIT
All Federal Reserve Banks



Latest figures April 18, 1923: Federal Reserve Notes, 2,229 million; Earning Assets, 1,159 million.

COMPILED APRIL 27, 1923

in recent months the prices of metals and building materials showed the greatest increases, while fuel prices showed a further decline from recent high levels. Compared with a year ago, metals were 37 per cent and building materials 28 per cent higher. The cost of living increased slightly more than one per cent during March to a level of 3 per cent higher than a year ago.

BANK CREDIT: During the month prior to April 11 a more moderate growth in the demand for credit from member banks in leading cities resulted in an increase of about \$48,000,000 in their loans made largely for commercial purposes, as compared with an increase of \$235,000,000 in the preceding month. Through withdrawal of funds from

investments and a further inflow of gold, member banks have been able to meet demands of their customers for increased credit and currency independently of the reserve banks.

Consequently, the total volume of Federal Reserve Bank credit, measured by total earning assets has remained relatively constant during the past months and in fact since the seasonal liquidation at the turn of the year. The volume of Federal Reserve notes in circulation has also changed but little as the larger demand for hand to hand money has been met chiefly by an increase in other forms of money in circulation.

There has been little change in money rates from those prevailing in March.

BUSINESS CONDITIONS IN THE SEVENTH RESERVE DISTRICT

MARCH reports of various commercial and financial activities in the Seventh Federal Reserve District supplement one another in emphasizing the present prosperous conditions. Labor is fully employed, with wage increases an important but not a deterring factor. The resultant increased purchasing power is having an immediate effect on retail trade, which in turn is stimulating demand for goods at wholesale, in many cases beyond anticipated spring requirements. This active distribution has contributed to the unprecedented volume of car loadings for this season of the year. With few exceptions production is near capacity, striking examples being that of automobiles and pig iron, with the March output for each the heaviest on record. Building permit statistics give indications of continued expansion. All this increased industry is being reflected in the financial operations of the district, as is seen in the payment by checks exceeding all months since December, 1920, and in the active demand for money from banks in industrial sections, which demand is being cared for largely without borrowing from the reserve bank.

Furthermore, with these indications of prosperity there are few signs of the evils generally attendant. In short, business shows a tendency to enjoy the advantages of prosperity in a conservative fashion.

An exception to the generally favorable conditions, however, is the result in agricultural sections of the protracted winter weather. Considerable damage to spring crops in this district is reported, as well as delay in additional planting. That farming may be further hampered by labor shortage is somewhat feared because of the attraction of employment to industrial centers.

MONEY AND BANKING

Continuation of the high rate of manufacturing operations caused an active demand for accommodation at banks in industrial centers during March and the first part of April. The demand was not excessive and found most banks able to take care of it without borrowing.

Marketing of grain and live stock, although retarded by weather conditions, enabled farmers to liquidate a part of their indebtedness. A number of farmers in some sections are paying off loans before maturity where they have this option. However, in many cases the funds for

these payments were obtained by borrowing from the Federal Land banks, Joint Stock Land banks, and other farm loan agencies. In parts of the district, there was an increase in borrowings by country banks from city banks to meet the increased demand for accommodation together with withdrawals of deposits by farmers.

With the exception of a slight increase in total liabilities, March business failure statistics for the district and entire country show little change from the February level, when the greater number of working days in March is taken into consideration. The number of failures during the first quarter of 1923, while approximately 30 per cent below the high level reached during the first three months of 1922, was still above the average. There were also fewer banking defaults during this period.

COMMERCIAL PAPER AND ACCEPTANCES

The prevailing rate for March on commercial paper advanced to 5 per cent from $4\frac{3}{4}$ per cent during February for most dealers, a few dealers reporting their prevailing rate at $5\frac{1}{4}$ per cent. The range in rates was from $4\frac{3}{4}$ to $5\frac{1}{2}$ per cent, a slight increase in the low rate over February. Four of the nine reporting dealers showed rates steady at 5 to $5\frac{1}{4}$ per cent the first part of April.

Sales of commercial paper during March were 13 per cent greater than in February, partly because of the longer month; compared with a year ago sales decreased ten per cent. Two dealers found a fair to average demand for paper; others reported the demand small. The supply of paper was reported increasing and good by several dealers, while another reported it small.

Reports to this bank on open bill market conditions covering the five-week period ended April 14 vary, two dealers reporting an adequate or good supply of bills, while another found the supply small. Two dealers report that the demand for bills was fair, although one reported it very light. Bills moved freely at the offered rates, which ranged at the close of the period from 4 per cent for short term to $4\frac{1}{2}$ to $4\frac{3}{8}$ per cent for longer maturities. Bid rates at the close of the period ranged from $4\frac{1}{8}$ per cent for short term to $4\frac{1}{4}$ to $4\frac{1}{2}$ per cent for longer maturities. Maturities of 30 to 90 days were in the best demand. Commodities principally involved were: grain, meats and provisions, agricultural implements, sugar, oil, and cotton.

Purchases by six dealers during the five-week period ended April 14, averaged \$2,474,400 weekly, compared with \$2,292,640 in the preceding period. Sales during this period averaged \$2,175,143, a decrease of \$355,724 from the average weekly sales in the period ended March 10. Bills held at the close of the period under review amounted to \$3,093,582, an increase of \$336,155 over March 10. Sales to the Federal Reserve Bank were only 14 per cent of the total sales in the current period compared with 45 per cent in the preceding period, while sales to local banks were 32 per cent compared with 8 per cent.

The volume of acceptances executed during March by twenty-seven banks representing the bulk of the accepting business in the district increased 31 per cent over the preceding month. Bills bought also showed considerable increase, and bills sold increased slightly. Bills held at the close of the month decreased 16 per cent from February. Of the bills held 70 per cent were the accepting banks' own bills compared with 62 per cent at the close of February. The liability of reporting banks on outstanding acceptances amounted to 29 million at the close of March, a decrease of approximately 10 per cent from February. Fourteen banks reported no transactions during the month.

Bankers' acceptances bought by this bank during March were 22 million, a decrease of four million from February. Sales from holdings amounted to one million. Bills held at the close of March were 33 million, an increase of five million over those held at the close of February. Bankers' acceptances rediscounted during the month amounted to \$25,000.

MEMBER BANKS IN THE DISTRICT

Loans and discounts at reporting member banks in Chicago and Detroit maintained their upward trend during March and the first week of April, while investments declined, principally in holdings of Government securities. Loans and discounts declined at Chicago banks in the week of April 11. Time deposits continued to move upward until April 11, when a decrease was shown; while demand deposits decreased the last two weeks of March, followed by increases in April.

At member banks in other selected cities, loans and discounts continued to increase. However, the rate of change decreased after the middle of March, when deposits began to decline. Investments at these banks decreased slightly the first part of April, following a slackening in the rate of increase the latter part of March.

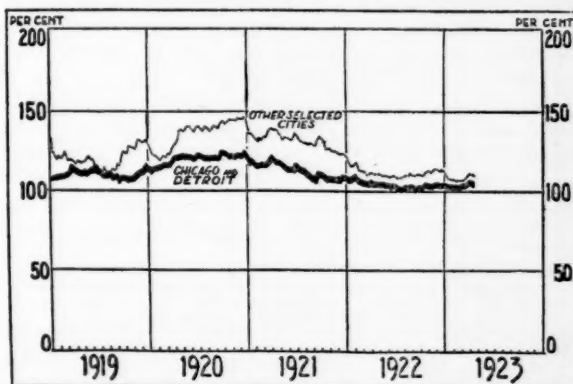
The accompanying chart indicates the relatively small strain there has been on banks since the early part of 1922, compared with preceding years. The chart is based on weekly reports of member banks in selected cities of this district and shows the ratio of loans, discounts, and investments of these banks to combined time and net demand deposits on which reserve is computed. The extent to which a change in form of the report, at the beginning of 1923, increased the ratio from what it would have been under exactly comparable figures with previous years cannot be exactly measured, but apparently the change had little effect.

At Chicago and Detroit banks the percentage ratio increased from 103.9 on September 12, 1919, the low point of that year, to a high point of 124.6 on December 24, 1920. The decreasing trend in 1921 and 1922 resulted in a low point of 99.8 on September 13, 1922. The ratio stood at 103.9 on April 11, 1923. In other selected cities the low point in 1919 was 108.7 on July 11 and the high point in 1920 was 146.9 on December 24. During 1921 and the first part of 1922, the ratio decreased rather steadily and after a slightly increasing trend the latter part of 1922, it dropped to a low point of 105.8 on February 14 of this year. On April 11, 1923, it stood at 110.0.

It is evident that while there has been a large increase in combined loans and investment holdings by these reporting banks from the low point reached after 1920, the increase in deposits has been such as to keep the ratio at approximately the same level or lower than the low point of 1919. During the period from January 10 to March 14, this year, the ratio in both groups of banks was lower than at any time in 1919.

The high ratio in 1920 and the first part of 1921 was made possible only by borrowings from the Federal Reserve Bank, compared with which the borrowings at present are very small. On the other hand, it appears from the reports that surplus funds of these banks have been placed in investment holdings to such an extent that should a sudden demand for loan accommodations or heavy withdrawals of deposits develop, it would be necessary to realize funds by liquidating investments or by borrowing.

RATIO OF LOANS, DISCOUNTS, AND INVESTMENTS TO NET DEMAND AND TIME DEPOSITS



Based on weekly reports from approximately 106 member banks in selected cities of the Seventh Federal Reserve District. Figures for loans, discounts, and investments prior to 1923 include rediscounts with Federal Reserve Bank; in 1923 include rediscounts, and acceptances of other banks and foreign bills of exchange or drafts sold with indorsement of reporting bank. Latest figures, shown April 11, 1923; Chicago and Detroit, 103.9; Other Selected Cities, 110.0.

JOINT STOCK AND FEDERAL LAND BANKS

Loans outstanding by the Joint Stock Land banks in the five states lying largely in this district were \$110,597,000 on March 31, an increase of \$8,723,000 over February 28. The corresponding increase of February over January was \$6,640,000. Loans by Federal Land banks

in the five states March 31 were \$103,715,000, increasing \$3,124,000 from February 28, compared with an increase of \$2,942,000 in February over January. This brings combined loans in the five states by these two agencies to \$214,312,000, compared with \$135,683,000 at the close of March last year.

POSITION OF RESERVE BANK

Loans to member banks continued to increase during March reaching 112 million on April 4 compared with 76 million on February 28. A marked reduction to 79 million was made on April 11, followed by an increase to 84 million on April 18. Total reserves did not change materially during March but increased from 509 million to 539 million during the week ended April 11, the increase being largely the result of the decrease in loans. Federal Reserve notes fluctuated within narrow limits and on April 18 were 396 million, approximately four million higher than the low point of March. Total earning assets showed little change during March but on April 11 were reduced because of decreased loans.

The accompanying chart pictures the operations at the reserve bank as reflecting the changes in credit conditions and the present favorable banking situation. Showing the ratio of member bank borrowings to the reserves which they have deposited at the reserve bank, the index on April 18 this year was 29.7 per cent compared with 202.4 per cent on December 23, 1920.

It appears from the chart that during the greater part of 1920 and 1921, member banks were borrowing from the reserve bank an amount greater than the aggregate reserve deposits, while except for the first few weeks of 1922, borrowings have been considerably less than one-half the reserve deposits during the years 1922 and 1923. At the high point of the ratio, more than double the amount of reserves deposited at the Federal Reserve Bank had been loaned to member banks.

The Federal Reserve Act provides that a minimum of 35 per cent be kept by the reserve bank against its deposits; therefore, not even the entire amount of deposits can be used for loans. Accordingly, aside from the use of funds obtained from capital stock payments and accumulated surplus, the reserve bank can meet borrowing

FEDERAL RESERVE BANK OF CHICAGO
Ratio of Loans to Member Banks to Member Bank Reserve Deposits



Latest figure shown, April 18, 1923, 29.7

requirements of member banks in excess of 65 per cent of deposits only by calling into action its note issuing function. While it was evidently the intention under the Act that the discount and note issuing functions of the reserve bank be closely connected, it should be kept in mind that when the ratio of member bank borrowings to their reserve deposits rises above 100 per cent, it means that member banks are relying on the reserve banks for funds in excess of the actual reserves which are deposited with the reserve bank, and that in order to meet this borrowing demand, it is necessary to issue Federal Reserve notes.

SAVINGS ACCOUNTS AND DEPOSITS

Continued improvement in the savings deposits in the district is reflected in reports to this bank from banks representing approximately 40 per cent of the total savings deposits of the district. An increase on April 1 of approximately one per cent was shown over the preceding month, while compared with a year ago an increase of over ten per cent was made. The average account on April 1 increased slightly over March 1, while compared with the preceding year the gain amounted to 2.3 per cent. Withdrawals for tax payment purposes were reported by a number of banks throughout the district.

DEBITS TO INDIVIDUAL ACCOUNTS

Increased business activity combined with March settlements and income tax payments caused the volume of payments by check drawn on clearing house banks in twenty-four centers of the district to reach a higher figure during March than for any previous month since December, 1920. In the four larger centers, March debits were larger than for any month since December, 1920, with the exception of January this year; and in the twenty

VOLUME OF PAYMENT BY CHECKS
Checks Drawn on Clearing House Banks, Seventh Federal Reserve District



Figures used are estimates for calendar months based on weekly reports to this bank. Latest figures shown in thousands of dollars, March, 1923, Chicago, Detroit, Milwaukee, and Indianapolis, 4,189,821; 20 Other Clearing Centers, 696,999

smaller centers the volume in March was the largest since July, 1920. The increase over February in the larger centers was 7.4 per cent, compared with 24.2 per cent shown last year; and in the smaller centers 31.2 per cent compared with 26.8 per cent last year.

BONDS AND INVESTMENTS

The lethargy displayed by the bond market in February continued during March, with prices for prime issues

trending lower, while a few speculative bonds advanced slightly. A decided betterment in the market was evidenced the first three weeks of April. The greatest strength continues to be shown in public utilities; rails and industrials are in moderate demand; municipal bond offerings have fallen off in the last six weeks. Joint Stock Land bank and Federal Land bank bond offerings are readily absorbed. Investors continue to be discriminating in their purchases.

AGRICULTURAL PRODUCTION CONDITIONS

Returns from 154 county agents representing 150,921 farmers show that winter wheat on April 10 in the Seventh Federal Reserve District was in fair condition only. The weather this spring has been detrimental to crops especially in northern Illinois, Indiana, and a portion of the lower peninsula of Michigan. The northern part of Michigan was covered with snow in the early part of April. These weather conditions have delayed the seeding of oats in all parts of the district to such an extent that some of the contemplated oat acreage is likely to be shifted to corn, soy beans, and other later crops. An increase in the alfalfa acreage is noticeable in parts of Wisconsin, Indiana, and Michigan; but a reduction in the timothy acreage is reported for the district.

These reports from all parts of the district indicate clover acreage early in April to be nearly equal to that of a year ago. They also indicate, however, that standing clover was damaged by the dry hot weather of last fall and the severe winter which followed. Some of this damaged clover acreage farmers plan to convert to corn, soy beans, and other crops. Little change in the corn acreage from that of a year ago is indicated at the present time.

Improved industrial conditions have caused a migrating of farm laborers from agricultural sections to industrial centers, limiting the supply of farm help, which is a factor in the planting of spring crops.

The Bureau of Agricultural Economics on April 1 forecasted a production of 572,317,000 bushels of winter wheat in the United States during 1923 compared with 586,204,000, the estimate for 1922. The United States production of rye was forecasted to be 75,784,000 bushels in 1923 compared with 95,497,000 bushels in 1922 and 67,762,000 bushels the five-year average.

GRAIN MARKETING

Receipts and shipments of wheat and oats were more at primary markets during March than in February. Corn receipts declined but shipments showed little change from the previous month. Compared with a year ago, receipts of oats and wheat increased, but corn declined; shipments of wheat and corn declined, but oats increased. The ample supply of cars has resulted in a freer movement of grains at eastern lake ports.

Export trade continues to lag because prices of United States grains in export markets of the world are still higher than offerings from other grain producing countries. Domestic trade has been rather slow.

Prices of wheat, oats, and corn in March were firmer at Chicago during the latter part than in the first half,

making the average monthly price about the same as February. Prices trended upward the middle of April.

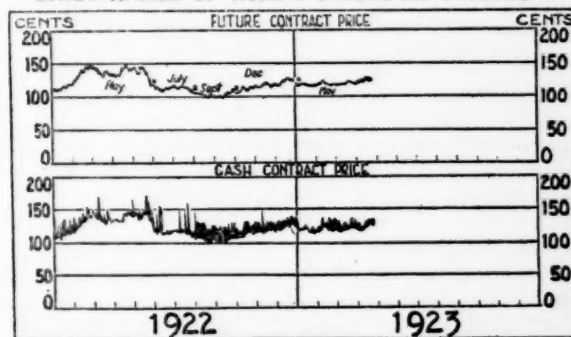
The total American, Canadian, and British visible supply of wheat was 189,635,000 bushels on March 31, 1923, compared with 205,159,000 on March 3, 1923, and 176,093,000 a year ago.

UNITED STATES VISIBLE SUPPLY OF GRAIN

Stocks in public and private warehouses at principal points of accumulation, at lake and seaboard points and in transit by water, in the United States, April 7, 1923. Figures supplied by the Secretary of the Chicago Board of Trade.

	In thousands of bushels				
	WHEAT	CORN	OATS	RYE	BARLEY
APRIL 7, 1923					
Warehouses and Afloat.....	45,378	27,469	23,222	18,431	2,535
Bonded.....	9,844		1,507	1,620	1,308
MARCH 10, 1923					
Warehouses and Afloat.....	46,581	29,730	26,208	16,305	2,778
Bonded.....	18,077		2,515	1,600	1,590
APRIL 8, 1922					
Warehouses and Afloat.....	34,163	45,305	63,606	8,700	1,667
Bonded.....	3,041		271	321	112

DAILY RANGE OF WHEAT PRICES AT CHICAGO



*Break in curve represents change from one option to another because previous option runs out. Latest figures shown. April 21, 1923; Future Contract Price, High 125 cents, Low 123½ cents; Cash Contract Price, High 136 cents, Low 126½ cents.

FLOUR PRODUCTION

The total flour production during March at forty-one mills in the district reporting to this bank increased considerably over February, although the operating ratio shows only a slight gain from 43.7 per cent of capacity in February to 44.5 per cent in March, because of three more actual working days in the month under review. A decrease was shown compared with a year ago when the operating ratio was at 47.7 per cent. Production of flour other than wheat increased 71.3 per cent over February, while comparison with a year ago shows a decrease of 11.3 per cent. Wheat flour production increased 9.6 per cent over February and decreased 5.9 per cent from a year ago.

Stocks of flour on hand at twenty-five mills March 31 were 1.8 per cent less than those on hand February 28.

Stocks of wheat on hand were 16.0 per cent less than those of the preceding month. Sales of flour in barrels at thirteen mills were 18.7 per cent larger than in February while dollar sales showed a gain of 7.8 per cent.

MOVEMENT OF LIVE STOCK

The receipts and slaughter of sheep and hogs were more in March of this year than a year ago; cattle and calves were slightly less. All were greater than in February, 1923.

SLAUGHTER IN MARCH

	CATTLE	HOGS	SHEEP	CALVES
Eight yards in district, March, 1923	208,407	1,097,373	236,765	129,723
Public stock yards in U. S. March, 1923	610,571	3,233,638	805,096	345,138
February, 1923	583,551	2,819,017	707,622	286,251
March, 1922	624,823	2,245,945	779,955	369,236

The Bureau of Agricultural Economics estimates that the number of brood sows on the farms in the United States was 6.7 per cent greater on April 1, 1923, than a year ago. The greatest increase was in the corn belt states; South Dakota showing a gain of 17 per cent; Iowa, Kansas, and Indiana, 10 per cent; Nebraska and Missouri, 8 per cent. The number of cattle on grain feed in the eleven corn belt states on April 1 is estimated to be 13 per cent more than a year ago.

AVERAGE PRICES OF LIVE STOCK

Per hundred pounds at Chicago				
		WEEK ENDED	MONTHS OF	
		APRIL 14, 1923	MARCH 1923	FEBRUARY 1923
CLASS				MARCH 1922
Native Beef Steers (general average)			\$ 8.85	\$ 8.85
Fat Cows and Heifers			6.25	5.65
Canners and Cutters			3.65	3.40
Calves			8.25	9.15
Stockers and Feeders			7.35	7.25
Hogs			8.19	8.20
Sheep			7.25@8.15	8.00
Yearling Sheep			11.60	12.15
Lamba			12.95	13.65

The movement of feeder cattle, calves, and sheep back to the farms was less in March than in February or a year ago.

MEAT PACKING

Fifty-seven meat packing companies in the United States reporting direct to this bank show total March sales in dollars 12.5 per cent more than a year ago and 2.2 per cent more than in February. Improvement in domestic demand since the close of the lenten period is reported by some of the companies. March receipts and shipments of meats and lard were more at Chicago than in the previous

INDUSTRIAL EMPLOYMENT CONDITIONS

Employment reports for the month of March give many indications of increasing industrial operations with the coming of the spring season. The most noticeable feature of the situation is the numerous wage increases that have been granted or are contemplated for the near future. Manufacturers experiencing difficulty in filling their requirements for labor are expressing concern about conditions during the next few months, when many laborers will return to farms and out-of-door work at a time when further expansion in industrial demand will be appearing. While the influx from farms to factories has been heavy this winter, the number so far returning to the farms is unusually small and indicates that any increased labor shortage is likely to be felt to a greater extent by the farmer than by other employers. Heavy requirements made on

month or a year ago. Employment in March declined from February less than one-half of one per cent in number of men, but increased 0.6 per cent in hours worked and 0.7 per cent in total payrolls according to reports of packers in the United States made direct to this bank.

Chicago wholesale prices of pork were a little firmer in March than in February; beef and mutton showed little change, but veal declined. Compared with a year ago beef showed little change; veal increased, but pork and mutton declined. Pork prices continue to be low in comparison with the cost of live hogs.

Cold storage holdings of meats and lard in the United States on April 1 were more than those on March 1, but were less than the five-year average for April 1; stocks of meat were more than they were a year ago, but lard holdings were less. Chicago stocks of lard were considerably larger on April 14 than on April 1.

The continental demand tended to slacken after the middle of March. Despite this, the total volume of fats and lard shipped in March for export to continental Europe was about equal to that shipped in January or February. The volume of meats forwarded to the United Kingdom was limited because the slight improvement in prices in England did not bring them to a parity with those in the United States. Consigned stocks already abroad were indicated to be larger on the continent April 1 than the month previous, but holdings in England declined.

BUTTER, CHEESE, EGGS, AND POULTRY

March creamery butter production in the district was about 14 per cent more than February, and increased 24.5 per cent over a year ago according to direct reports to this bank. Statistics of the American Association of Creamery Butter Manufacturers indicate a larger production for the United States than in the previous month or in March, 1922. Receipts of butter, cheese, eggs, and poultry were more at Chicago than a year ago; all were more than in February, with the exception of poultry, which declined.

March volume of creamery butter sales according to reporting companies in the district was nearly 5 per cent larger than February, but showed little change from a year ago; egg sales were more than in either period.

Wholesale prices during March of butter, cheese, eggs, turkeys, and geese averaged less at Chicago than in February, but fowls, spring chickens, and ducks advanced.

the available labor supply by the construction and automobile industries, together with wage rates in these industries, have considerably affected both the wage scales and the turnover in many other lines of manufacture.

Returns from 296 firms reporting to this bank show an increase of 2.5 per cent in employment and of 10.4 per cent in payrolls during the month of March. According to about three-fourths of these firms the increase in man-hours of work amounted to 7.9 per cent.

Iron and steel industries again show expansion, 56 firms with 52,763 men increasing the number of employees 3.3 per cent over the previous month. Contractors are adding more men to their working forces and many brick yards resumed operation in March, as evidenced by a heavy

gain in employment. Some decrease took place in the average employment in lumber and millwork, although the number of working hours increased and a shortage of labor is reported.

Rates of common labor have been advanced by steel mills from 36 to 40 cents an hour, and by packing plants from 37½ to 42½ cents, the new rates effective April 16. At Detroit, the advances for common labor range from 5 to 10 cents. Brick plants report increases ranging from 10 to 16 per cent. At saw and planing mills wages have ad-

vanced 2½ to 5 cents an hour. Construction trades generally are obtaining substantial increases. Other increases reported are for the manufacture of paper, musical instruments, electrical goods, railway equipment, and in foundries. Molders and coremakers of an aluminum foundry whose rates were raised from \$5.50 to \$5.75 a day in February, were given another raise of 25 cents effective April 1. In many industries where no general wage increases have been carried through, individual increases have been granted.

FUEL AND POWER PRODUCTION

COAL

Bituminous coal production continues to lag behind consumption, a condition brought about largely by the fact that consumers are meeting a part of their requirements from stocks accumulated during the winter months. In the latest survey of soft coal stocks made under the direction of the Federal Fuel Distributor it is estimated that these supplies were reduced approximately 2,000,000 tons during the month of February and that a further reduction took place during March, in view of the lowered rate of output during that month and the continued high rate of consumption. Since the early part of March the weekly rate of output has stood at about 10,400,000 tons, with the exception of the week ended April 7, when a further drop was occasioned by the observance of a holiday. On the other hand, in spite of the recent lowered output and the production losses sustained during the miners' strike last summer, preliminary estimates indicate that the total tonnage mined during the coal year ended March 31 was approximately 419,710,000 tons, or less than 4 per cent below the output of the year previous.

In Illinois and Indiana the continued lack of market during March resulted in the shutting down of additional mines and the curtailment of operations in others, many producers averaging less than three days a week. Total production for Illinois during March amounted to only 6,786,390 tons, a decrease of 15.2 per cent from the previous month.

With the total production of anthracite in the coal year ended March 31 more than 38 per cent below the average for the past nine years, current operations show little evidence of curtailment, the estimated March production of 9,382,000 tons being the highest monthly output since March, 1918. Weekly production is being maintained

above the 2,000,000 ton mark but has been unable to keep pace with consumption.

With the exception of the domestic market, which has continued very active on account of the prolonged cold weather, buying has been very quiet. Large consumers are still holding off for lower prices and there has been little demand for storage except on the part of the railroads. Few contracts have been made. Prices have continued on the decline, with the exception of a slight strengthening of Indiana and Southern Illinois quotations in the early part of April, and there is as yet no indication that the bottom has been reached. Anthracite quotations in the Chicago district are also lower.

ELECTRIC ENERGY

The aggregate March output of electric energy of 515,911,620 K. W. H. at nine central station companies in the district reporting to this bank was 11.9 per cent greater than in February. This increase resulted largely from the three more days in the month under review, as average daily output shows an increase of only 1.1 per cent during the month. Compared with March a year ago the increase was 25.4 per cent. Although the peakload demand increased slightly during the month, the load factor for March was at 58.5 per cent compared with 58.4 per cent in February. The load factor for March, 1922, was at 55.6 per cent.

Sales of electric energy to industrial power users show a decrease in the daily average of 3.3 per cent from February, while the aggregate sales during the month were 8.8 per cent higher. An increase of 43.8 per cent was reported over a year ago. The ratio of peakload demand to capacity of plants was at 75.2 per cent during March, while last year it was 68.9 per cent. Peakload demand and plant capacity increased 19.2 per cent and 9.1 per cent, respectively, over a year ago.

MANUFACTURING ACTIVITIES AND OUTPUT

AUTOMOBILES

Automobile production in March was greater than in any previous month. Passenger car production exceeded the previous high record of June, 1922, by approximately 57,000, or 22 per cent. The extent of the increased activity is brought out by the fact that combined passenger car and truck production for the first three months this year exceeded that of the first five months last year. The demand from dealers continues strong and some manufacturers are far behind with orders.

Manufacturers reporting through the National Automobile Chamber of Commerce and direct to this bank, representing practically complete February production, built

319,527 passenger cars in March compared with 259,383 in February, an increase of 23.2 per cent. The relative increase in truck production was much greater—59.1 per cent for manufacturers producing 34,063 trucks in March, compared with 21,411 in February.

Manufacturers are reluctant to raise prices, but some small increases were announced during March and the first part of April. Increases in the price of nearly everything entering into the construction of automobiles have about reached the point where they offset the economies that have been put into effect in production and sales costs.

The transportation situation improved slightly during the month, but there is still a curtailment of shipments

East because of inadequate transportation facilities. Increase is shown, however, in shipment figures in carload lots over the record months of January and February this year. Driveaways were heavier than in any other month since June, 1920.

FACTORY SHIPMENTS BY ALL MANUFACTURERS†

	CARLOADS		DRIVEAWAYS		BOAT	
	1923	1922	1923	1922	1923	1922
January	35,228	15,357	30,027	7,479	728	143
February	36,147	19,636	43,600	10,173	882	180
March	43,774	27,753	58,320	16,917	1,900	560

†Reported by National Automobile Chamber of Commerce.

*Partly estimated.

IRON, STEEL AND OTHER METALS

The outstanding feature in the steel industry continues to be the challenge of demand upon the mills to produce sufficient material to meet current requirements. Delays in steel deliveries have resulted in some duplication of orders but this is not general and such a tendency is being watched very carefully by the more conservative mills in order to safeguard against possible cancellation difficulties. The speculative feature in making new commitments because of prolonged deliveries, together with some tendency to limit inquiries to fewer companies, is a factor in the more conservative domestic demand at the present time.

The total pig iron output was greater during March than for any other month on record. The daily average was second highest in the history of the industry, being only 164 tons less than that in September, 1918. On the last day of March, 296 stacks out of a possible 424 in the United States were in blast. This was an increase of 18 stacks over the previous month.

There has been gradual improvement in the fuel supply, but it is still inadequate to permit full operation of steel mills. Despite this handicap, the United States production of steel ingots was greater in March than in any other month on record. Ingot production of thirty companies in the United States was 3,402,007 tons compared with 2,919,017 in February, and 2,370,751 a year ago. Unfilled orders on the books of the United States Steel Corporation were 7,403,332 tons on March 31 compared with 7,283,939 a month ago, and 4,494,140 tons on March 31, 1922. Prices have advanced to higher levels.

The American Zinc Institute reports March production and shipments of slab zinc at 48,731 and 49,574 tons, respectively, compared with 42,443 and 48,153 tons in February. Stocks on hand declined.

CASTINGS

Operations in the casting industry are gradually approaching capacity. Twenty-two foundries in the Seventh Federal Reserve District consumed more raw material in March and shipments were larger in volume than in February or January.

PERCENTAGE CHANGES IN MARCH FROM PREVIOUS MONTHS

	NUMBER OF FEBRUARY COMPANIES		NUMBER OF JANUARY COMPANIES	
	1923	1922	1923	1922
Pig iron consumed.....	22	+22.3	22	-0.3
Iron scrap consumed.....	22	-16.3	22	-18.2
Steel scrap consumed.....	22	+20.5	22	+11.3
Total tonnage consumed.....	22	+19.6	22	+8.4
Shipments (tonnage).....	22	+22.1	22	+14.5
Shipments (dollars).....	22	+26.3	22	+20.8

STOVES AND FURNACES

March production and shipments of stoves and furnaces were seasonally more than in January or February. The

moulding rooms were operating 13 per cent nearer to capacity than in February and 32 per cent nearer than a year ago.

PERCENTAGE CHANGES IN MARCH FROM PREVIOUS MONTHS

	NUMBER OF FEBRUARY COMPANIES		NUMBER OF MARCH COMPANIES	
	1923	1922	1923	1922
Shipments	16	+30.0	19	+43.1
Orders accepted	11	+12.4	13	+102.6
Stocks on hand.....	10	+17.9	13	+17.5
Cancellations	6	+186.4	6	+83.5

AGRICULTURAL MACHINERY

Incomplete returns from the agricultural machinery industry in the United States in March show production seasonally more than in February or January. Since the beginning of the year sales have expanded. The total dollar sales for March were about 37 per cent more than in January or in February. Much of the present buying is due to the accumulation of deferred purchases during the last two years. The spread between the prices the farmer receives for commodities compared with those he has to pay for new equipment tends to keep buying on a conservative basis. The average number employed during January, February, and March, was about 66 per cent of normal for each of those months. The total dollar shipments of agricultural pumps for March were 20.3 per cent more than in February, and 38.8 per cent more than a year ago.

CLOTHING AND TAILORING INDUSTRY

A growing demand, especially for the better grades of merchandise, is again reflected in current reports from manufacturers of men's clothing in this district. Sales in the ready-made industry have shown a gradual but steady improvement during the spring and summer season which has just been brought to a close, while in contrast with a year ago, accounts outstanding are considerably less. Prices on new fall lines now being shown are slightly higher on account of the upward trend in the price of wools, but a good part of the increased cost of materials is being absorbed by the manufacturer.

Seasonal activity in the tailor-to-the-trade industry received a marked impetus during March from the heavy pre-Easter demand for garments. Orders, production, and shipments were more than 90 per cent in excess of the February figure, and more than 50 per cent above the level reached a year ago.

PERCENTAGE CHANGES IN TAILORS-TO-THE-TRADE

Number of firms reporting.....	10
Orders for suits compared with—	
(a) February, 1923	+53.0
(b) March, 1922	+50.8
Number of suits made as compared with—	
(a) February, 1923	+94.7
(b) March, 1922	+54.7
Number of suits shipped as compared with—	
(a) February, 1923	+94.7
(b) March, 1922	+54.5

RAW WOOL AND FINISHED WOOLENS

Raw wool markets were inactive the first two weeks in March and prices in the domestic and foreign markets were easier. Domestic trading in half blood and finer wools was more active after the middle of March and prices of those grades strengthened. Dealers report a slightly larger total volume of sales of raw wool in March than in February. Shipments from Chicago increased over those for the previous month but were below a year ago.

Woolen mills in the district are operating close to capacity, and for March these manufacturers report a larger volume of sales than in February. Dealers are showing an inclination to make commitments for a larger portion of their fall requirements than they did at this time last year. Prices are firm.

SHOE MANUFACTURING, TANNING AND HIDES

March production and shipments of shoes were seasonally more than in February and continued to exceed those for a year ago. Shipments were 2.8 per cent more than production. Stocks on hand on April 1 showed little change from the previous month. Unfilled orders held by twenty-four companies were equal to 149.7 per cent of the shipments made by those companies during March.

PERCENTAGE CHANGES IN MARCH FROM PREVIOUS MONTHS

Based on pairs and compiled from direct reports to this bank

	NUMBER OF COMPANIES	FEBRUARY 1923	NUMBER OF COMPANIES	MARCH 1922
Production	33	+16.4	32	+41.0
Shipments	33	+18.4	32	+31.5
Stocks on hand.....	26	+ 0.5	24	+25.8
Unfilled orders on hand.....	25	- 1.1	24	+72.7

Tanners in the district report March production and sales of leather slightly more than in February, and nearly 50 per cent over a year ago. There was a slackening in demand the first part of April. Leather prices remained firm.

Calf skins and packer green hides were more active at Chicago during March than in February; sheep skins continued to move in good volume. March shipments of green hides and skins from Chicago were more than in the pre-

BUILDING MATERIALS AND CONSTRUCTION ACTIVITIES

CEMENT

The demand for cement in this district has shown unusual strength; shipments during March exceeded production, slightly lowering the stocks held by manufacturers. Dealers and consumers, however, to some extent have been storing up cement in anticipation of a possible car shortage during the rush season. Prices have remained stable.

The Portland Cement Association reports an increase of 22 per cent in production and of 73 per cent in shipments for the country as a whole during March. This speeding up in production was partly in preparation for necessary shut-downs for plant repairs which began the last week in March. Stocks fell off 3.4 per cent and are now 6 per cent below the supply a year ago. In comparison with a year ago both production and shipments were 48 per cent heavier.

LUMBER

Demand for lumber within the Seventh Federal Reserve District remains heavy, and numerous inquiries for immediate shipments are reported by manufacturers and dealers. Sales during March show a general increase although many orders could not be filled on account of weather conditions. The Maple Flooring Manufacturers Association reports that shipments for the month were below the volume of new orders received and that stocks on hand were reduced. On account of the delay experienced in receiving shipments from the southern pine and west coast mills, stocks in many yards are low. A large volume of these delayed shipments has been coming in lately and the receipts

vious month or a year ago. Prices of lamb skins remained firm; all others were nominally less in March than in February.

FURNITURE

The furniture manufacturing industry of the district shows little evidence of a decline from the marked activity of the past few months. With orders booked in March practically equal to the volume of February sales and a large number of unfilled orders still on the books, most factories continue to operate very close to capacity. Shipments were quite heavy during March, showing an increase of 13.3 per cent over the high February level, while cancellations were light. Collections were about equal to the February figure. Returns for the country as a whole indicate a corresponding activity throughout the industry.

BOXES AND CONTAINERS

Materially increased activity in the box and container industry is evidenced in current statistics received from manufacturers in this district and reflects the general improvement in business conditions which is being felt at this time. March sales were somewhat in excess of the February figure, several firms reporting a volume of business greater than the seasonal peak reached in October of last year, while production was considerably heavier. Thirteen firms averaged 79.4 per cent of ordinary capacity during the month. Sales in the wooden box division of the industry increased 18.1 per cent over the February figure, while production was 10.7 per cent heavier, four firms averaging 93.3 per cent of ordinary capacity.

of lumber at Chicago are showing heavy gains. An increase for March of 28 per cent is shown over February and of 32 per cent over March a year ago. The corresponding gains in the shipments from Chicago were 37 and 46 per cent, respectively. Prices in general are firm with an upward tendency in retail prices.

BRICK

Brick manufacturers report that weather conditions during March curtailed both production and deliveries to a slight extent. On account of roads throughout northern Iowa being in such a condition that it was impossible to haul brick or tile, the demand there was very light. In Chicago with building operations active, deliveries exceeded the production, and the supply of stocks on hand was lowered during the month. While stocks on an average are considered below normal, many plants have a plentiful supply, but shipment is being delayed by car shortage. Plants in a position to load from five to ten cars a day were reported getting not more than one or two. Sales for the month were heavy and greatly in excess of those of a year ago. Prices remained steady.

CONTRACTS AND PERMITS

Although weather conditions during March were not favorable for a general resumption of building activities, work progressed at an increased rate over February. Contract and permit figures indicate a heavy demand for new building almost half of which, measured in costs, is for residential purposes. The contracts awarded in the district totaled \$59,868,432, an increase of 28 per cent from

February and 4 per cent over the high figures of March a year ago. In Illinois the awards for residential building alone constituted about two-thirds of the total valuation.

Permits issued in Chicago were for smaller projects than those of February, and the increase in estimated cost was less than 10 per cent. In Indianapolis also, where the gain for the month was heavy, the percentage increase in

number of permits exceeded the increase in valuation. In other large cities of the district, Des Moines, Detroit, and Milwaukee, a reverse condition prevailed, valuation gains outrunning the advances made in numbers. Permits issued in 50 cities of the district during the first three months of this year have exceeded those of the same period of 1922 by 28 per cent in number and 78 per cent in cost.

MERCHANDISING CONDITIONS

WHOLESALE TRADE

Aggregate dollar sales during the first quarter of 1923 were ahead of a year ago for all groups of reporting wholesalers, with increases averaging 8 per cent for groceries, 12 for shoes, 18 for drugs, 24 for dry goods, 52 for hardware, and 65 for automobile accessories.

In groceries and hardware, the quarterly gains over last year are due mostly to February increases, as neither of these groups made even the usual seasonal advances during March. Dealers in both commodities attribute the lack of more pronounced gains to the prolonged cold weather. March sales in drugs also show a smaller gain over February than last year, but the difference is less striking. In dry goods, shoes, and automobile accessories, on the other hand, the seasonal increases are larger than in 1922.

Although the majority of wholesalers were carrying heavier stocks March 31 than at the beginning of the month, hardware dealers were the only group to average a noticeable gain, with their 12.1 per cent increase, nine points above the next highest group. Accumulation of hardware stocks is seasonal, March and April being the months for receiving goods ordered in the fall for spring requirements. This group showed also the largest advance over 1922 inventories. Among the reasons given are the increased demand for hardware this year, the abnormally low stocks in 1922, and the advancing prices.

In most groups the gains over a year ago were more marked for collections than for sales. Of forty-five firms giving dollar amounts, only four report declines from March, 1922, and only six declines from last month. Accounts outstanding on March 31 were heavier than a year ago for all groups, with increases ranging from 9.6 per cent for groceries to 30.5 for hardware.

CHAIN STORE TRADE

Of nine stores reporting dollar sales to this bank, all but one made new records for March, and three exceeded sales for any previous month recorded.

Three grocery chains averaged 18.9 per cent gain over last month, and 34.5 over a year ago. Corresponding increases for three drug chains are 16.5 and 36.3, respectively.

DEPARTMENT STORE TRADE

With the close of March, department stores reporting to this bank completed the twelfth month since their aggregate sales began to show gains over the preceding year. Unlike the first increase of 0.6 per cent in April, 1922, the March gain averaged 31.8 per cent—the largest yet noted. Furthermore, the increases have spread from a few of the larger stores at first to all but nine of the entire number reporting for March.

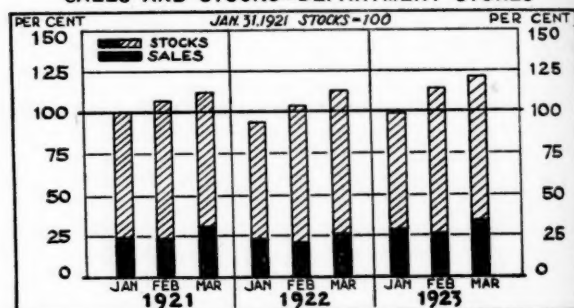
That the early Easter is only partly accountable for the heavy March trade is evident from the fact that in 1922 combined March and April gains over February barely

equaled the single month's increase this year of over 30 per cent.

Aggregate stocks on hand at the end of March increased over February 28 inventories by 7.7 per cent which compares with the corresponding 7.2 per cent last year. This seasonal similarity, together with the gain of only 10.1 per cent over March 31, 1922, in contrast to the much larger gain in sales, would indicate no tendency in general to accumulate stocks. By comparing stocks on hand at the end of each month with sales during the month as shown in the accompanying chart a lower ratio appears for the first three months of 1923 than for the two previous years.

March collections were 26.0 per cent ahead of a year ago, with all but five firms reporting gains. Their ratio of 48.1 per cent to accounts outstanding February 28 is somewhat higher than for last month or for March, 1922.

SALES AND STOCKS—DEPARTMENT STORES



Report of 47 department stores to this bank. Latest figures shown, March, 1923; Stocks, 122.2; Sales, 34.4

MAIL ORDER TRADE

Quarterly sales by Chicago's two leading mail order houses averaged nearly 40 per cent heavier this year than in 1922. For March alone, gains over a year ago and over February, 1923, were 37.3 and 25.0 per cent, respectively.

TRANSPORTATION

Although carloadings for January and February of this year were unusually large, they were exceeded in March. There is evidence that the railroads are carrying freight practically to capacity and in many instances the requisitions for freight cars exceed the railroads' available supply. While transportation difficulties are generally measured in the form of car shortage, the real difficulty is primarily the result of the greatly increased freight movement. Many of the railroads find themselves in a position where trackage, transfer, and terminal facilities are inadequate to meet the requirements. It is apparent that even with a large increase in rolling stock, the increased freight movement cannot be handled satisfactorily until facilities are extended to allow freight cars to be loaded, transferred, and hauled with less delay.

RELATION OF CREDIT TO BUSINESS

THE following extracts from the recent report of Secretary Hoover's committee on business cycles and unemployment will be of interest to anyone who is analyzing the present business and credit situation:

"Expansion of bank credit is a necessary condition of expansion of business operations.

"But an overexpansion of credit may so increase the purchasing power of business men that it will merely result in enabling them to bid against one another for limited supplies of goods and materials so as to force prices above what consumers are willing and able to pay. Bank credit often expands so rapidly that it lifts the buying or investment power of business men out of line with the general buying power of the community. Because of their strategic position, the banks have an unusual duty and an exceptional opportunity to give sound information and counsel to business men.

"While the relationship between the volume of credit and the volume of business and the movement of prices is not always simple to interpret, it appears to be sufficiently close to make it a matter of first importance that the volume and the flow of credit should at all times be tested by the contribution which additions to the volume of credit make to the total of economic production. Additions to credits which cannot be economically validated by a commensurate effect in actual production are speculative, and as such should be subjected to control, so that business and industry can be maintained in a healthy state."

The foregoing is a statement of principle by a committee of leading business men. Facts are presented below which relate to the three divisions referred to, viz., the volume of business, prices, and the volume of credit.

THE VOLUME OF BUSINESS

In the following summary, comparisons are made between those months when low points were reached and the month of March, 1923.

Industry—Production, measured by the index of output in twenty-two basic industries, has increased since July, 1921, 67 per cent.

Employment, measured by the number of workers employed in New York state factories (fairly representative of industrial employment in the country as a whole), has increased since August, 1921, 28 per cent.

Trade—Wholesale trade, measured by the sales reported by about 700 firms representing practically all sections of the country (with allowance made for seasonal changes), has increased since July, 1921, 23 per cent.

Retail trade, measured by the sales reported by about 300 department stores in principal cities throughout the country (with allowance made for seasonal changes), has increased since September, 1921, 15 per cent.

The growth in the physical volume of production indicates a rate of industrial recovery almost without parallel in American business, and the volume of goods produced and passed into consumption during the first quarter of 1923 probably exceeds that of any similar period in the history of the country.

PRICES AND WAGES

Changes in prices and wages from the low points may be summarized as follows:

Prices—The Bureau of Labor Statistics index of wholesale prices increased from January, 1922, to March, 1923, 15 per cent.

Wages—The hiring rate of wages for unskilled labor in eastern industrial centers increased from April, 1922, to April 15, 1923, 22 per cent. Average weekly earnings of workers in New York state factories (fairly representative of industrial earnings in the country as a whole) increased from April, 1922, to March 15, 1923, 11 per cent.

THE VOLUME OF CREDIT

The high industrial activity has involved a great increase in the volume of bank credit in use. Comparisons are made below between those dates when low points were reached and April 11, 1923:

Member banks in leading cities—Total loans and investments have increased \$1,974,000,000 since March 8, 1922, or 14 per cent. Commercial loans have increased \$783,000,000 since August 30, 1922, or 11 per cent. Demand and time deposits have increased \$2,453,000,000 since September 21, 1921, or 19 per cent.

Since the first of the year the growth of total loans and investments has been due entirely to the rapid increase in commercial loans; loans on stocks and bonds and the investment holdings of those banks have declined. This shift in the form of bank credit is in response to the increasing demand for credit for commercial and industrial purposes.

The use of reserve bank credit, particularly in the industrial sections of the country, has also increased from the low point of last summer, as follows:

All Federal Reserve Banks—Earning assets have increased \$138,000,000 since August 9, 1922, or 14 per cent.

Loans to member banks have increased \$263,000,000 since July 26, 1922, or 69 per cent.

Included in earning assets are the Government securities and acceptances held by the reserve banks, as well as their loans to member banks. As the volume of securities and acceptances owned has decreased, the volume of loans to member banks has risen to somewhat larger amount, and earning assets consequently have risen. The lending power of the reserve banks remains very large, as is apparent in the high reserve ratio, the result mainly of the heavy inflow of gold.

RELATION OF CREDIT CAPACITY TO PRODUCTION CAPACITY

The relation of this great supply of credit, still held in reserve, to the productive capacity of the country, is referred to as follows in the current issue of the Federal Reserve Bulletin:

"The present lending capacity of the country's banking system in view of the great growth of the reserves at the reserve banks, is now far in excess of the credit needs of the country's productive capacity. In such a situation it is the available supplies of labor and equipment and not the potential supply of credit that in the end must fix the limit which may be attained by aggregate national production. As these limits are approached, credit policy must be increasingly influenced by careful consideration of the continued effectiveness of further additions to the total volume of credit in contributing to increased productivity."

MONTHLY BUSINESS STATISTICS ASSEMBLED BY THE FEDERAL RESERVE BANK OF CHICAGO

Index numbers express a comparison of business for the month indicated, using the monthly average for 1919 as a base, unless otherwise indicated. Figures for latest month shown partly estimated on basis of returns received to date. Data refer to the Seventh Federal Reserve District unless otherwise noted.

Employment—	No. of Firms	March, 1923	Feb., 1923	March, 1922	Feb., 1922		No. of Firms	March, 1923	Feb., 1923	March, 1922	Feb., 1922
Iron and Steel Products:						Indianapolis—					
Number Employed.....	56	91.1	88.2	61.8	56.7	Number	231.6	87.8	196.1	92.6	
Amount of Payroll.....	56	87.4	77.5	52.9	43.8	Estimated Cost.....	284.1	150.2	193.7	109.8	
All Industries:						Des Moines—					
Number Employed.....	296	96.6	94.3	77.9	75.9	Number	160.8	118.7	173.5	128.4	
Amount of Payroll.....	296	112.4	101.7	88.0	78.4	Estimated Cost.....	193.2	101.4	112.4	102.3	
Meat Packing—(United States)—						Detroit—					
Sales (in dollars).....	62	83.6	81.8	76.4	73.0	Number	178.9	87.2	95.0	46.4	
(Monthly Average, 1920-1921=100)						Estimated Cost.....	243.0	105.4	71.4	47.5	
Iron and Steel—						Milwaukee—					
Pig Iron Production:						Number	154.3	116.7	158.6	99.0	
Illinois and Indiana.....	132.0	114.4	89.0	67.7		Estimated Cost.....	123.6	66.7	115.0	33.6	
United States.....	138.2	117.5	79.9	64.0		Forty-five Other Cities—					
Automobiles—(United States)—						Number	152.7	60.1	146.7	58.6	
Production:						Estimated Cost.....	188.4	81.4	126.4	44.9	
Passenger Cars	231.3	187.8	110.5	78.9		Total—Fifty Cities—					
Trucks	131.8	82.8	74.9	49.9		Number	172.4	87.4	148.4	72.3	
Shipments (Monthly Average, 1920=100):						Estimated Cost.....	253.2	165.6	144.8	83.6	
Carloads	209.2	172.8	132.6	93.9		Freight Carloadings—					
Driveaways	148.6	111.1	43.1	25.9		(United States)—					
Boat (Base Figures 1920), partly estimated)	56.0	26.0	16.5	5.3		Grain and Grain Products	105.6	104.1	105.0	130.1	
Stoves and Furnaces—						Live Stock	94.6	97.2	81.8	87.1	
Shipments (in dollars).....	18	84.5	65.0	55.8	44.5	Coal	114.4	113.6	120.3	115.6	
Furniture (Monthly Average, 1919, 1920, 1921=100)—						Coke	167.5	160.4	93.8	85.1	
Orders (in dollars).....	13	131.8	129.3	109.7	106.7	Forest Products	131.6	115.4	91.6	87.3	
Shipments (in dollars).....	13	160.7	146.7	121.7	111.1	Ore	35.1	27.9	14.3	11.1	
Shoes—						Merchandise and Miscellaneous	118.9	105.7	104.6	91.7	
Production (in pairs).....	37	178.4	153.7	132.7	123.0	Total	113.9	104.6	101.6	94.1	
Shipments (in pairs).....	37	188.0	159.7	147.2	123.0	Wholesale Trade—					
Boxes and Containers—						Net Sales (in dollars):					
Sales (in dollars).....	6	128.2	108.6	69.4	61.5	Groceries	39	72.8	69.4	73.2	57.7
Boxboard Consumption (tons)	6	107.6	85.7	70.8	59.4	Hardware	20	114.5	78.5	85.7	51.9
Electric Energy—						Shoes	12	82.4	47.0	70.3	46.0
Output of Plants (KWH.)	10	156.1	139.4	124.5	113.1	Drugs	13	116.5	98.5	102.9	82.9
Industrial Sales (KWH.)	10	156.2	143.6	107.7	100.2	Dry Goods	12	103.3	87.5	82.3	71.7
Flour Production*—						Automobile Accessories	7	88.3	61.3	53.5	39.8
(In barrels)	45	87.7	75.9	94.0	81.7	Retail Trade (Department Stores)—					
Building Construction—						Net Sales (in dollars):					
Contracts Awarded (in dollars):						Chicago	9	136.0	107.0	107.9	98.9
Residential	168.3	113.9	107.2	58.4		Detroit	6	134.4	105.0	90.4	76.4
Total	108.9	85.4	105.7	58.9		Des Moines	3	112.6	82.1	102.8	74.1
Permits:						Indianapolis	3	160.7	107.8	130.5	93.4
Chicago—						Milwaukee	3	84.7	93.8	79.8	
Number	243.5	137.9	241.7	115.5		Outside	40	103.4	74.6	87.1	70.9
Estimated Cost.....	349.8	320.8	222.7	156.2		Seventh District	64	124.6	93.7	95.1	78.2
						Retail Trade (United States)—					
						Department Stores.....	289	123.1	89.7	101.2	79.9
						Mail Order Houses.....	4	112.7	83.9	83.5	59.4
						Chain Stores:					
						Grocery	21	188.4	158.8	149.2	130.3
						Drug	8	144.7	125.3	123.4	114.8
						Shoe	5	145.5	70.8	103.8	80.6
						Five and Ten Cent.....	4	163.4	117.4	118.4	100.8
						Music	4	96.0	87.8	80.6	75.0
						Cigar	3	134.5	109.7	124.3	109.3

*Index numbers on flour production revised to include 45 firms. Revised index for January, 1923, 84.2, and for January, 1922, 69.7.

The following are sources of data used in obtaining the index numbers in cases where they are not based on direct returns to this bank: Iron and Steel, Iron Age; Automobile shipments, National Automobile Chamber of Commerce; Freight Carloadings, American Railway Association; Retail Trade, United States, Federal Reserve Board.